

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A flow control device comprising; comprising;
an inlet port through which fluid is supplied; supplied;
an outlet port through which the fluid is delivered; delivered;
a valve body which is arranged in a passage between the inlet port and the outlet port so as to open and close the passage; passage, and
a valve body guide means which moves said valve body so as to allow the fluid in said passage to flow at a flow rate which is lower than a basic control rate of said flow control device, said valve body guide means pushing down and pulling up said valve body;
and
a fine controller which controls a range of movement of said valve body,
wherein said valve body guide means comprises a piston which is movable relative to
said valve body along an axis of the valve body, said fine controller controls a range of
movement of said piston, and a pressure control diaphragm which drives said valve body
by a pressure of compressed air which acts on one face of said pressure control
diaphragm and which is driven by said piston.

2. (Canceled)

3. (Currently Amended) A flow control device according to claim 1, wherein ~~wherein~~, said valve body guide means is arranged along a direction along which said valve body moves.

4-5. (Canceled)

6. (Currently Amended) A flow control device according to claim 1, wherein claim 2, wherein, said valve body guide means is arranged coaxial to said valve body.

7-15. (Canceled)

16. (Currently Amended) A flow control device according to claim 1 claim 12, wherein said piston is urged by compressed air.

17-20. (Canceled)

21. (New) A flow control device comprising:

an inlet port through which fluid is supplied;
an outlet port through which the fluid is delivered; a valve body which is arranged in a passage between the inlet port and the outlet port so as to open and close the passage;

a valve body guide means which moves said valve body so as to allow the fluid in said passage to flow at a flow rate which is lower than a basic control rate of said flow control device, said valve body guide means pushing down and pulling up said valve body; and

a fine controller which controls a range of movement of said valve body, wherein said valve body guide means comprises a pneumatic actuator which is movable relative to said valve body along an axis of the valve body, said fine controller controls a range of movement of said pneumatic actuator, and a pressure control diaphragm which drives said valve body by pressure of compressed air, which acts on one face of said pressure control diaphragm, and which is driven by said pneumatic actuator.